



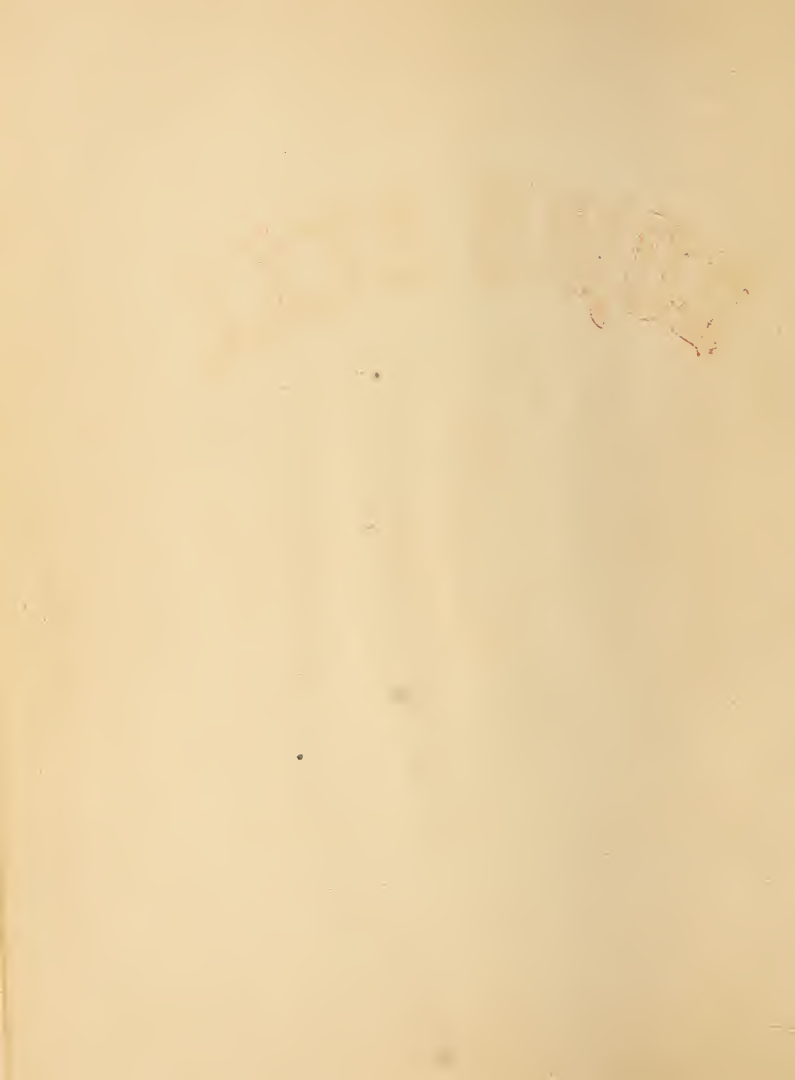
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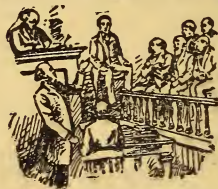
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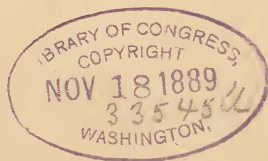
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MANUAL
OF
INSTRUCTION
IN THE USE OF
DUMB BELLS



INDIAN CLUBS
AND OTHER EXERCISES.

BY
M. BORNSTEIN.



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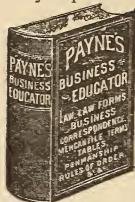
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P R E F A C E .

IN presenting this little volume, I do not profess to say that I am its sole author, for I have too much respect for those writers who are older and wiser than I am, as not to adopt some of their maxims and profit by their long experience. I may humbly say, however, that I have made every effort to gather from the very best authorities and bring together in convenient form such information and substance, which I hope will go to make this a book acceptable for the purpose for which it is intended.

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DUMB BELLS and Indian club exercises have of late years become one of the most universal methods of developing the muscular anatomy of the human body. Schools, colleges, and even theological seminaries have adopted their use in their respective institutions with the most beneficial results. For keeping the body in a healthy and vigorous condition there has as yet been nothing invented, which for its simplicity and gracefulness can be favorably compared with the Indian club exercise.

Dumb bells (of which I shall speak more in detail hereafter), is and always has been recognized as one of the best and oldest mediums of physical culture, and before the introduction of Indian clubs they were used almost exclusively. True, the exercise with dumb bells admits of less variations and, therefore, is more monotonous than the swinging of Indian clubs; but for developing the lo-

cal muscles of the body, such as the arms, chest, etc., dumb bells are far more preferable. However where the general building up of the muscles and sinews of the entire body is requisite, the medical profession unite with me in recommending club exercise, as they bring all parts of the body into play proportionately.

My experience of many years, which has brought me in contact with the most prominent gymnasts and athletes of the country, warrants me to distinctly state that there is no exercise so desirable or so attractive to the debilitated or so positive in its results than the handling of Indian clubs. Particularly is this the case for those who are wanting in vitality and whose constitutions are impaired by the sluggish circulation of the blood. I may conscientiously say, a few moment's exercise with a light pair of clubs will accomplish more than all the medicines and tonics in the world; and if I were asked what, in my humble opinion, constitutes the true secret of good health, I should frankly answer, "Total abstinence from all stimulants, moderation in all things, and plenty of good exercise.

Look, for instance, at such men as Professor Miller, our modern Hercules, the gladiator of the present age, whose towering form and manly figure are sufficient evidence of his ruddy health and tremendous power and strength. Professor Laflan, another example, justly termed the "Champion Club Swinger of the World," is a perfect Adonis of physical beauty and a model of what may be called a perfectly formed man, whose every outline is correct in symmetrical perfection. Both these gentlemen attribute their great strength to constant bodily exercise and the use of clubs and dumb bells in their younger days.

If the youths of the present day would make it an imperative duty to take some manner or form of exercise every day, say either running, jumping or a turn on the trapeze or a pair of suspended rings, or join some reputable gymnasium, they would not grow up to be dyspeptic and puny-looking young men.

Mr. Blakie, in his charmingly written book on *Gymnastic Exercises*, in speaking of the rising generation of the United States, says :—" Amer-


lean boys, as a rule, lanky and half-built, compare unfavorably with the lads of the same age in England or Germany. This is from a want of proper instruction and guidance in their physical welfare, and much stress is laid on the essential importance in having in our large schools and colleges properly constructed gymnasiums and qualified teachers and instructors who are educated gentlemen—such as Prof. Maclaren and Dr. Sargent—and not men who profess to be capable to instruct in the gymnasium—but are better qualified to be janitors.”

The author approves strongly of the use of dumb bells and Indian clubs ; he dwells with especial force upon the value and feasibility of exercise at home, and shows us that the means of bringing out the dormant muscles are within the reach of the poorest man. I contend, therefore, that the cultivation of the body is as essential to the physical development as the cultivation of the mind ; and I regret to say that many of our most profound scholars pay too little attention to their physical condition, their outward appearance contrasting strangely with their mental develop-

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ment. If they would only practice the handling of dumb bells or Indian clubs a few hours each day so as to develop and strengthen their muscles, the result would be apparent not only in their stronger and healthier constitutions physically, but their mental powers would be improved correspondingly.

To men of sedentary habits, whose vocation confines them a great deal in their offices and counting-houses, I would say, that the laws of nature cannot be slighted with impunity. Turn away from your brain work, if but for sixty seconds at a time, to some vigorous exercise, and you may rest assured that you will go back to your work refreshed and invigorated, your power and energy will increase, and you will be amply repaid for the extra effort and the trifling loss of time.



TO THE LADIES.

AND now a word to the ladies. Exercise for woman is as essential as it is for man. It is an indisputable fact that a system of light exercise gives precision and action to the muscles, it will not only give strength but add greatly to the natural gracefulness in women; and if with a light pair of clubs or wooden dumb bells (weighing about 3 lbs.) they would go through a routine of exercises for fifteen minutes in the morning and at night before retiring, they would greatly enhance their bodily strength; and after practicing for a few months, their chests will begin to expand and their arms become plump and muscular. And what lady would not be proud of a well developed form, a beautifully-shaped arm, a high chest and an erect carriage? Of course, there are numerous other exercises that would be appropriate for women, but their mode of dressing would preclude it. The clothing must be roomy and not confining.


Walking as an exercise for women cannot be too highly recommended; not a listless or lazy lounge, but a good, brisk walk for an hour in the morning; it gives a vital tone to the system, causes the blood to circulate, imparts a rosy hue to the cheeks and has a tendency to give health and strength to the whole body.

CHILDREN.

IT is as natural for children to exercise and play as to breathe, and, when unrestrained, nearly all children are distinguished for their restless activity; nature bids them exercise and they obey its mandate, often in spite of ignorant parents, nurses and teachers, who from the want of a better knowledge of the laws of health, endeavor to suppress the natural inclinations of the child. If parents would inoculate in the minds of their offspring and impress upon their own the absolute necessity of a course of muscular training at stated times, they not only would confer an everlasting blessing on their children, but their hearts would be gladdened by seeing them exuberant in spirits and in glowing health and strength.

However, there is one thing I desire to impress upon you, that in your arrangements on this point these exercises should not be taken from what is called play time, *nothing* should be taken from play time, and nothing be introduced

at play time but play. These exercises ought to be adapted to circumstances and regarded as studies, and inoculated into the children's habits and mode of life so that they may retain the inclination for muscular exercises throughout life. It will not only occupy their attention and divert their mind from vicious inclinations, but it will lay the foundation to a strong muscular frame, which will enable them to resist fatigue and exposure in after life more successfully than if they had been brought up to study in close confinement of the house and without exercising their muscles.



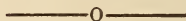
GENERAL INSTRUCTIONS

To be Observed While Exercising.



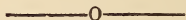
C L O T H I N G .

The clothing should be loose and roomy, and the arms free. Move without restraint and allow a full expansion of the chest.



TIME OF EXERCISING.

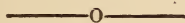
Fifteen or twenty minutes daily, just after the toilet and previous to retiring, are the best time for exercising, but if circumstances will permit exercise during the day whenever the opportunity presents itself, so much the better.



WEIGHT OF BELLS.

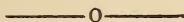
In regard to the proper weight of bells there is a conflict of opinion and ideas; some recom-

mend light and others heavy bells. In my judgment I most emphatically advocate the use of what are termed medium sizes (say from 5 to 10 pounds each), adapting the weight to the ability of the person to handle them. Muscular men who wish to increase their strength, a heavy bell is more desirable, as they naturally look to something more substantial than a slender or weak person would.



POSITION.

Stand erect, chest thrown well out ; inhale a long breath, so as to expand the lungs ; place the heels together in most of the exercises, and make every effort to go through the movements as gracefully as possible.



CAUTION.

Great care should be taken when exercising with clubs or bells that the movements be not

made violent or sudden, as they are apt to strain the muscles. If the fatigue is too great after handling them, rest for a while. "A little at a time and often" should be the motto to follow in all athletic exercises.



DUMB BELLS.

DUMB BELLS, without doubt, as a means of physical culture, are considered equal to, if not superior to any article of gymnastic apparatus. Any man, woman or child with the least ingenuity can exercise every muscle and joint of the body in a very short space of time. Dumb bells are available at all seasons and at any time or place. They have also the advantage of being compact and portable, occupying but little space either in or out of use.

As a general rule dumb bells are made of cast iron, but are sometimes turned from wood of a heavy nature, such as maple, birch, oak, &c. The best are made of rosewood or *lignum vitæ*.

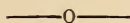
Wooden dumb bells are particularly adapted

for ladies and children, and are used in all calisthenic or light exercises; and when used in schools in classes with a systematic series of evolutions, are very healthful and attractive.

Heavy dumb bells are of little practical value and accomplish hardly anything in the way of exercise, affording but a few movements that serve as a test of strength and ability to lift heavy weights. When using heavy dumb bells for this purpose, they should be handled with great caution and both arms used alternately, so as to avoid a one sided development.



FIRST POSITION.



(Fig. 1.)—Grasp the bells firmly in each hand, palms turned inward, holding them close to the body and at arm's length, stand in an erect position, feet slightly apart, the body well braced, inhale the breath frequently, be elastic in your movements, and go through the exercises with animation and spirit.



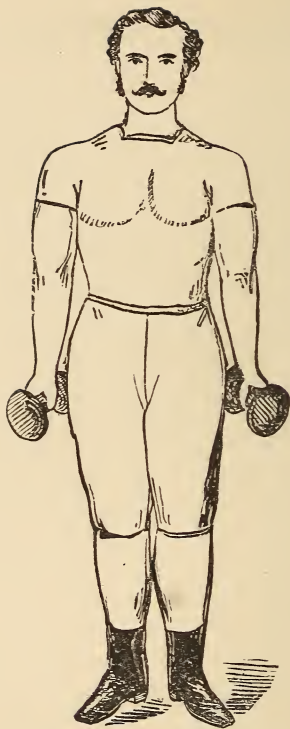
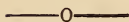


Fig. 1.—First Position.

FIRST MOVEMENT.



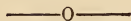
(Fig. 2.)—Hold the dumb bells well in front of the chest, elevate them above your head as far as the arms can reach, then vary this by raising one after the other. Repeat the same, always returning to the original position.





Fig. 2.—First Movement.

SECOND MOVEMENT.



(Fig. 3.)—Let the arms hang loosely by the sides, palms turned in; raise and lower the bells under the arm pits as often as possible, without becoming tiresome. This movement is an excellent one for the arms and wrists.



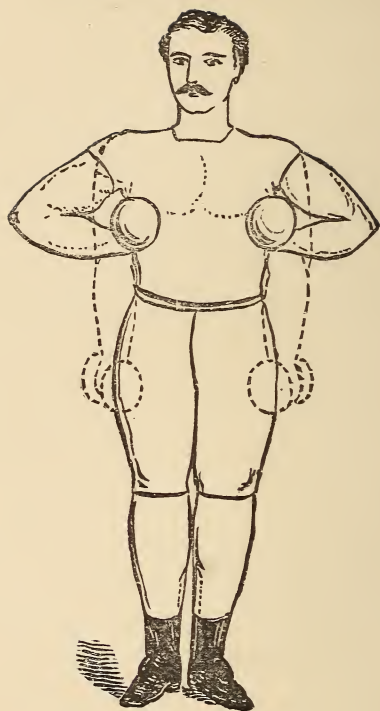
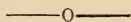


Fig. 3.—Second Movement.

THIRD MOVEMENT.



(Fig. 4.)—Take a position as if you were about to box with a friend; stand firmly and strike out boldly with the arms, one after the other, without any unnecessary violence. This is also an excellent movement, as it sets the blood coursing through the veins and prevents that sluggishness which arises from inactivity.



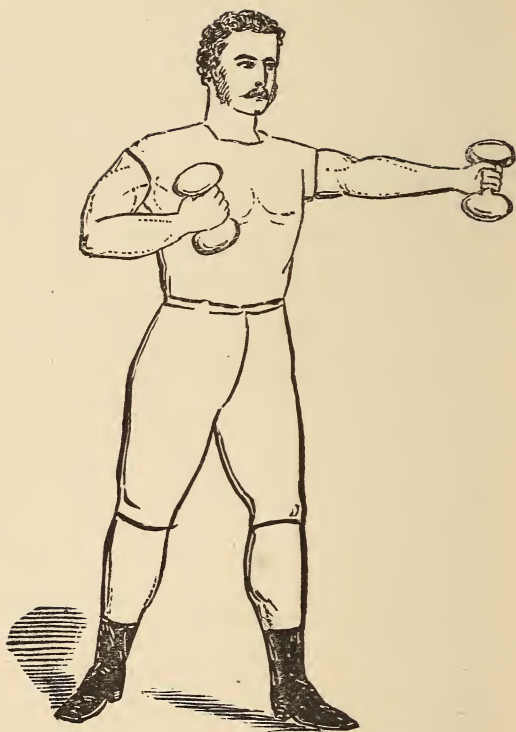
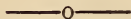


Fig. 4.—Third Movement.

FOURTH MOVEMENT.



(Fig. 5.)—Stand as straight as possible, bring the bells even with the chest, inhale a long breath and retain it as long as you can; strike out the arms forward and backward, as if you were making an effort to make the elbows meet at the back. This is a first rate movement for the expansion of the lungs.



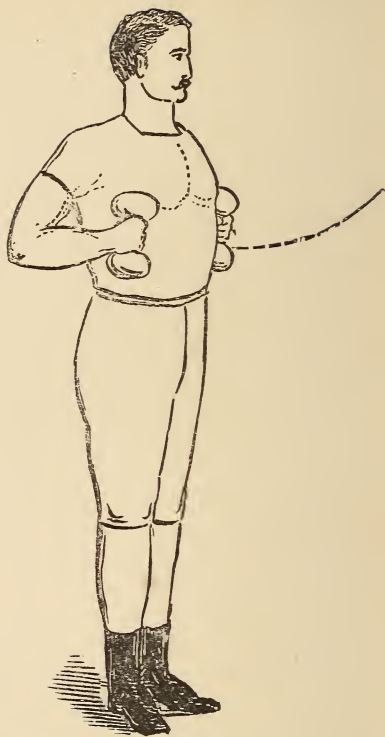
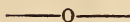


Fig. 5.—Fourth Movement.

FIFTH MOVEMENT.



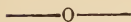
(Fig. 6.)—Stretch out the arms from the shoulders in front of you ; place the bells together, swing them back in a parallel line as far as you possibly can, just as if you were trying to strike them together at the back, but endeavor to keep the arms in a line with the shoulders. With a little perseverance you will be able in a short time to make them meet at the back equally as well as in front. This movement is an excellent chest expander.





Fig. 6.—Fifth Movement.

SIXTH MOVEMENT.



(Fig. 7.)—Place the bells on the floor between your feet, which must be apart, raise the bells from the floor at arm's length above your head and bend backward as far as possible with the bells elevated ; keep the arms stiff. This is a useful movement to straighten the back and shoulders.



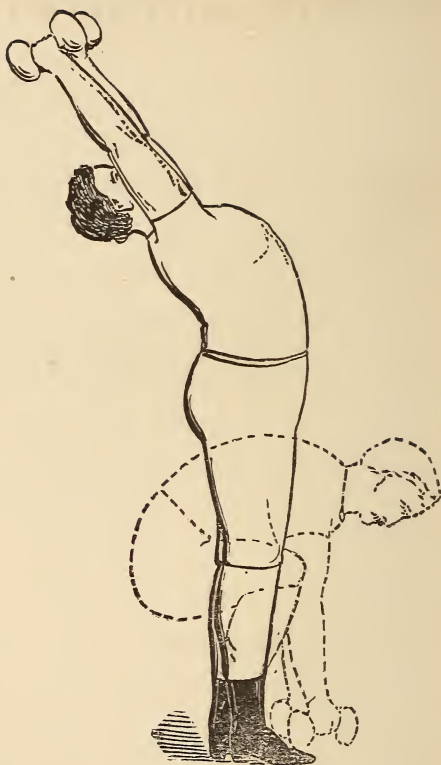
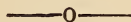


Fig. 7.—Sixth Movement.

SEVENTH MOVEMENT.



(Fig. 8.)—Hold the arms loosely at the sides, palms turned in, raise the arms straightened out slowly, until the bells touch over the head ; repeat this several times. This is a difficult movement and is considered a good test of strength and very trying to the muscles.



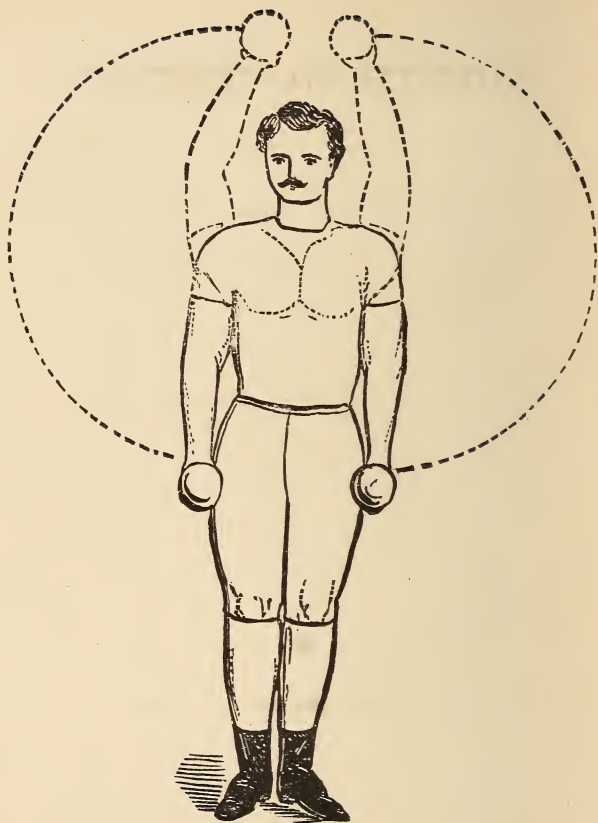
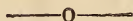


Fig. 8.—Seventh Movement.

EIGHTH MOVEMENT.



(Fig. 9.)—Let the arms hang loosely at the sides ; swing them out one after the other, like the pendulum of a clock, backward and forward, as high as you can. This is an excellent movement for sthrengthening the shoulder joints.



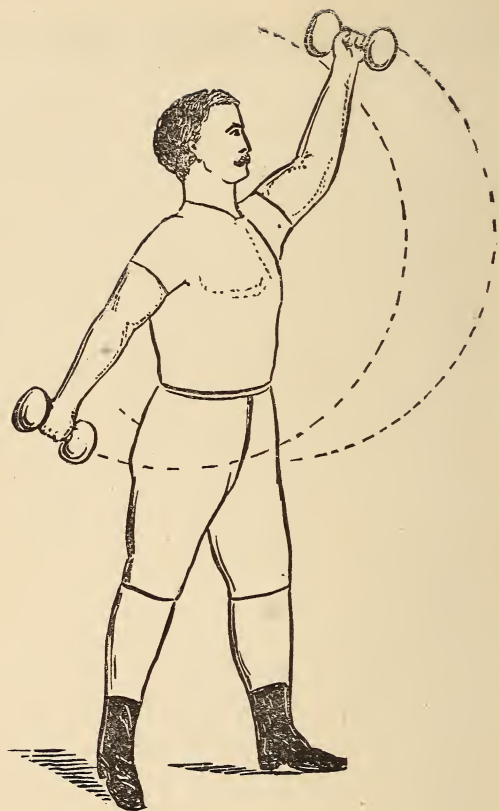
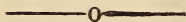


Fig. 9.—Eighth Movement.

HEAVY DUMB BELL LIFTING.



(Fig. 1.)—The lifting of heavy dumb bells should not be attempted without a previous thorough course of training in a gymnasium or a long experience in handling dumb bells.

There is no special method of raising them, the object to be attained is simply to raise a heavy dumb bell, weighing from fifty pounds to one hundred and fifty pounds, from the ground, at arm's length above the head. It is usually accomplished by raising the bell from the ground to the hips, bending the elbow, and raising it to the shoulder, resting for an instant, then forcing it up slowly, far above the head at arm's length.

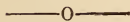




Fig. 1.— Heavy Dumb Bell Lifting

INDIAN CLUB EXERCISES.

A WORD TO BEGINNERS.



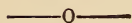
BEGINNERS should be cautioned not to commence with heavy clubs. A pair of light ones is best adapted for the commencement, bearing in mind that by perseverance and increasing strength you will be able to swing heavier ones with ease in due time. Learners ought to avoid striking the clubs together, grasp the handles properly, as a carelessness in this respect will prevent the attainment of a graceful style of swinging as well as avoid all danger.

Commence by learning to exercise thoroughly with one club at a time, as all double motions are but a combination of movements with both clubs.

In regard to the proper weight of clubs for beginners, it depends, to a certain extent, upon their condition and strength. To the majority of beginners, who have not gone through a previous course of training, I would suggest that a pair of clubs, weighing from five to ten pounds each, is of a sufficient weight to start with. It is better to use a pair that can be easily managed at first, than a pair that would exhaust you after a short while, for it is the continuous exercise from which the most benefit is derived, and as the strength increases, a heavier pair may be substituted.



POSITION IN CLUB SWINGING.



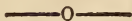
(Fig. 1.)—The position in exercising with clubs should be erect, chest thrown out, body well braced, with feet slightly apart, grasping the handle of the clubs close to the ball, giving full play to the wrists, and endeavoring to attain an easy and graceful style.





Fig. 1.—First Position.

FIRST EXERCISE.



(Fig. 2.)—This motion is the foundation of a great many, and occurs in most of the movements. It is advisable to practice it thoroughly first with one hand and then with the other.

Begin in resting the left club by the side, elevate the right hand until it reaches a little above the head, then dropping the club and allowing it to describe a circle at the back. When you start the circle give the club a twirl, and the momentum of its weight will carry it around ; at the completion of the circle, give the wrists a twirl and bring it over the shoulder, resuming the first position and bring the clubs in front of the breast. Practice with the right and left arm alternately until you become proficient.



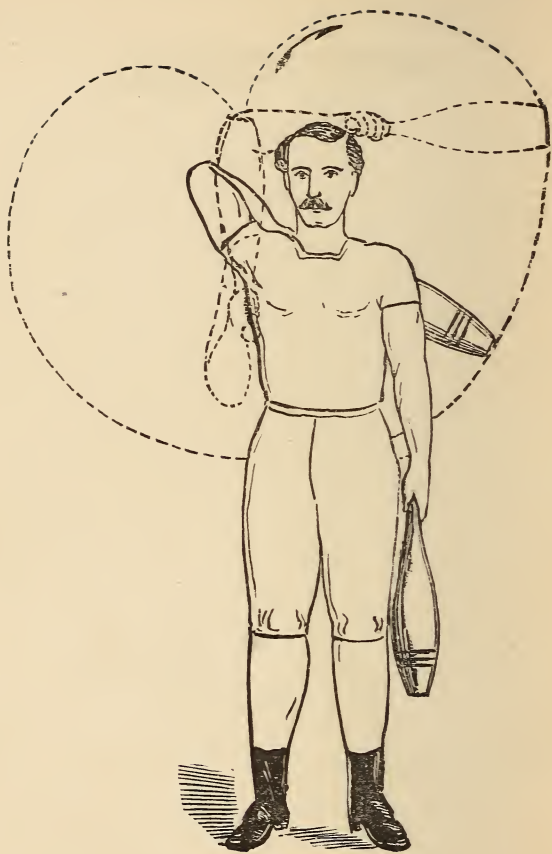
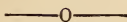


Fig. 2.—First Exercise.

SECOND EXERCISE.



(Fig. 3.)—Extend the club to arm's length straight above the head, swing the club to the left parallel with the breast ; describe a circle in front, the right shoulder being the centre, giving the club a twirl as before ; when the circle is completed and the club is placed where it first started, drop the club to the left, allowing it to fall to the back, and describe the circle behind, same as in first exercise. Repeat this continuously, and it will form, when executed with both clubs, a wreath within a wreath, and produces a beautiful effect.



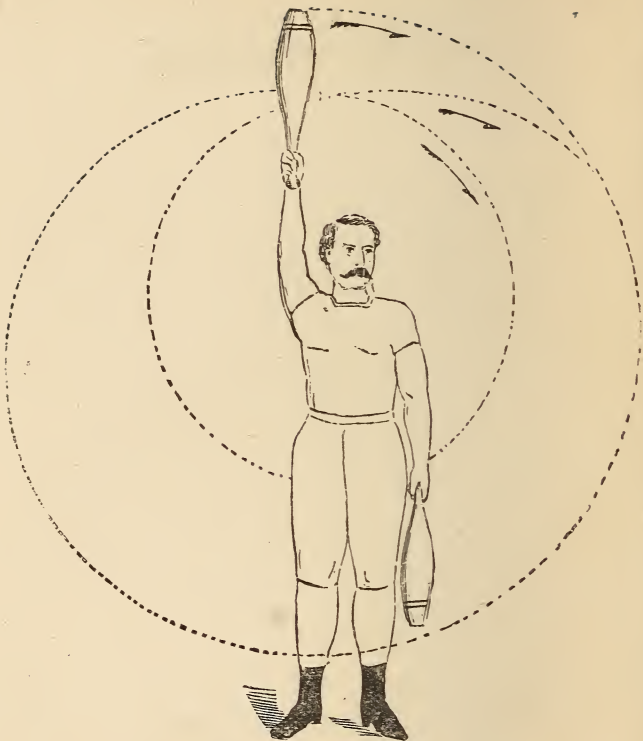
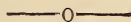


Fig. 3.—Second Exercise.

THIRD EXERCISE.



(Fig. 4.)—This movement, as well as the previous one, had better be practiced with one club at a time. Begin by elevating the hand until it reaches above the centre of the head, inclining the club slightly to the left, keeping it parallel with the breast, the hand changing at the same time from the top of the head to the back of the neck, describing a circle, same as in first exercise; when the club reaches a point opposite your right leg, twist your wrist suddenly, moving your elbow to the front, raising your club toward the right ear, then extend the club at arm's length to the right, allowing the club to drop toward the floor, then throw the club out parallel to the extent of the arms, swing it in a circle to the left in front of the body, and when it reaches the left shoulder, bring the club to the position above the head and repeat the first exercise in connection with the above.

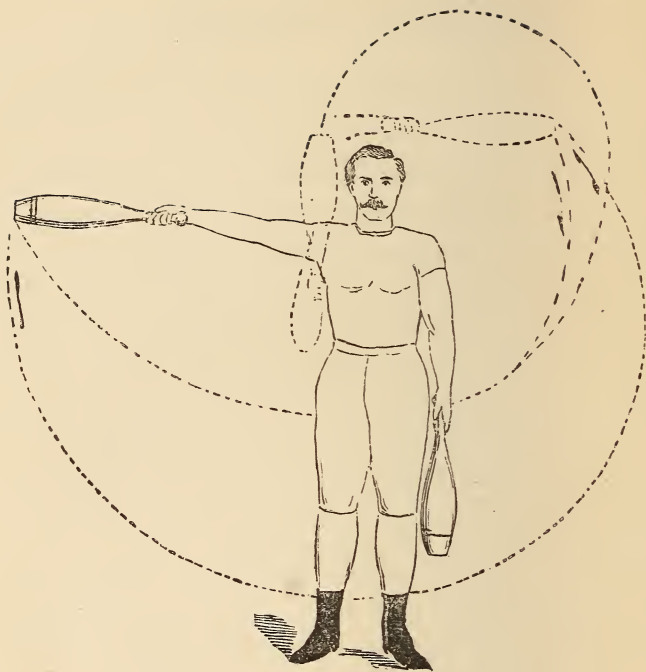
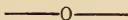


Fig. 4.—Third Exercise.

FOURTH EXERCISE.



(Fig. 5.)—This is an extension movement for two clubs. Bring the clubs well up in front of the breast, palms turned inward, elevate them over the head, throwing them backward, making the hands sink well down back of the neck as far as you can to the extent of the arms, curving the body backward. Repeat this four or five times in succession. This is an excellent movement for the spine.



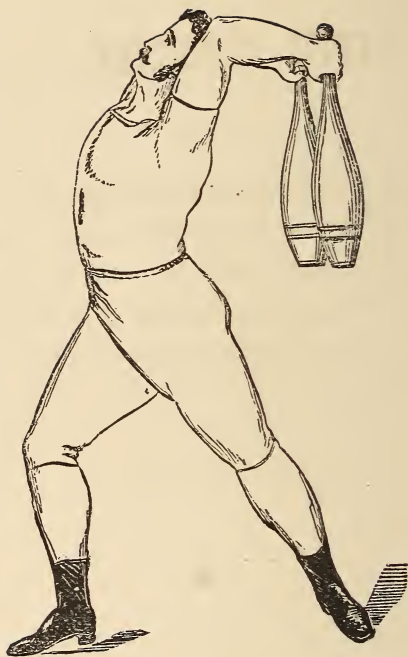
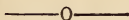


Fig. 5.—Fourth Exercise.

FIFTH EXERCISE.



(Fig. 6.)—Extend the arms outwardly in front of the breast as far as possible, arms crossed, palms turned outward, raise the clubs slowly to arm's length, letting the clubs hang over the shoulder, always keeping the clubs perpendicular. As this is a simple and light extension movement, repeat it a number of times. It is particularly beneficial in strengthening the wrists.





Fig. 6.—Fifth Exercise.

SIXTH EXERCISE.



(Fig. 7.)—This movement is for both clubs and is very pretty. Commence with the right hand same as in first exercise, allowing the left hand to follow quickly, keeping up the circle continuously, alternating the motions with the right hand, without bringing the hands up in front of the breast at the end of each circle.



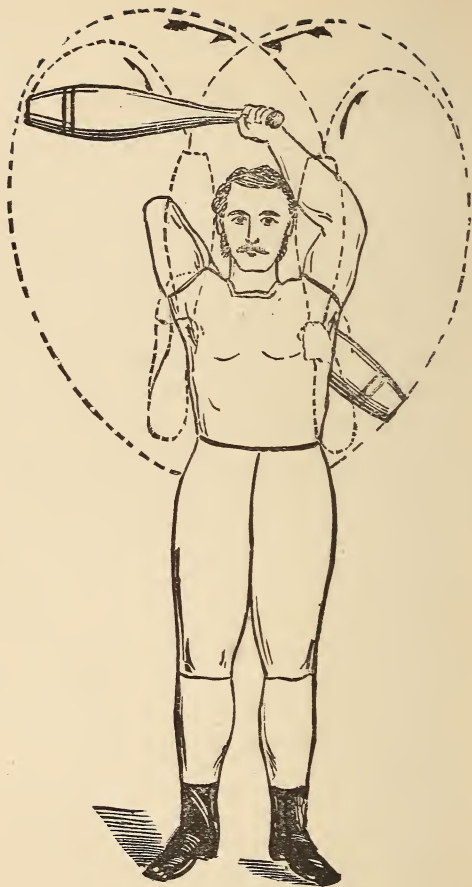
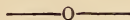


Fig. 7.—Sixth Exercise.

SEVENTH EXERCISE.



(Fig. 8.)—This movement is also for both clubs, and as there is a danger of striking the clubs together, great care must be taken in keeping them apart ; start with the movement as in first exercise with the right club, performing the latter part of the motion with the left club, and as one club has the start of the other, it forms a pretty combination.



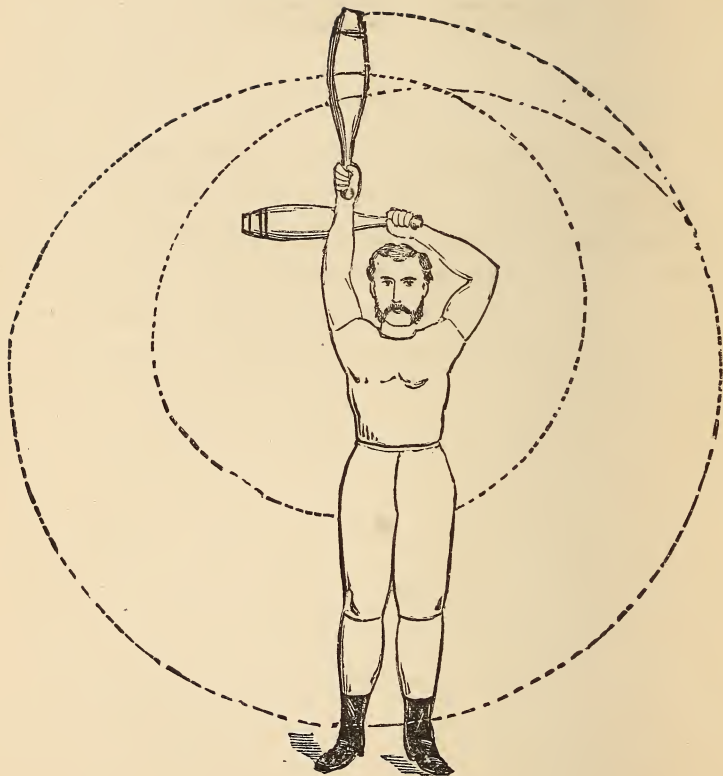
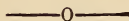


Fig. 8.—Seventh Exercise.

EIGHTH EXERCISE.



(Fig. 9.)—Commence with both hands together, same as in the third exercise, keeping both clubs in motion continuously, extending the left arm to the left, bringing both clubs parallel for an instant, then allowing the left hand club to drop toward the floor, describe a circle in front of the body, and when it reaches the left shoulder, combine it with the motion as in first exercise.



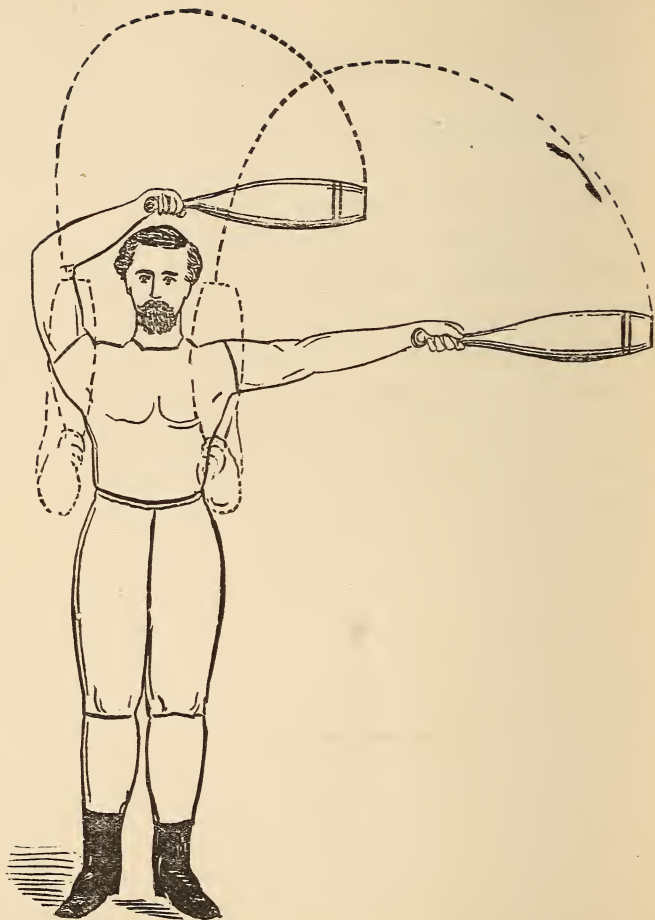
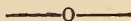


Fig. 9.—Eighth Exercise.

NINTH EXERCISE.



(Fig. 10.)—This is a fine combination movement. Each hand performs a distinct motion by itself and is quite difficult ; start both clubs at the same time (commencing as in first exercise), with the right hand, with the left hand execute the movement as explained in the second exercise, moving the clubs to the left ; reverse the motion with the right and left arm, by making the clubs revolve to the right.



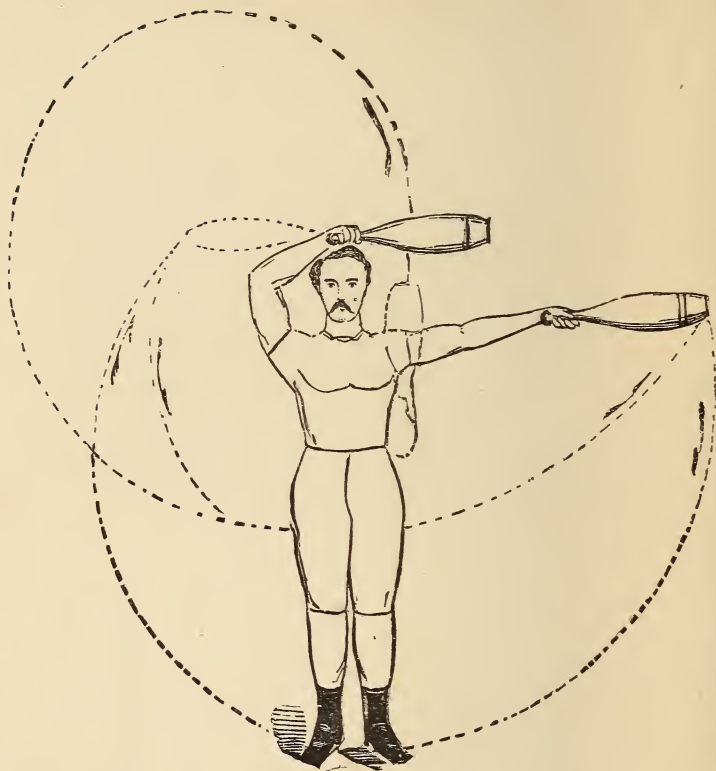
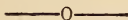


Fig. 10.—Ninth Exercise.

TENTH EXERCISE



(Fig. 11.)—This is an exercise for a single club only. Use a club as heavy as you can, say twice the weight of those you would use in pairs ; hold the club up in front of the breast, same as in first position, bring the club upward and over the shoulder as far back as you can, then carry it upward and forward to arm's length, and then backward with force as if you were wielding a cutlass. Repeat this movement as often as you can, as it is an excellent one.





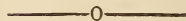
Fig. 11.—Tenth Exercise.

THESE are innumerable other exercises with the Indian Clubs, but they are too complicated and difficult to explain here.

It is advisable at first to have some person, who is qualified, to instruct you in a few of the introductory movements; although, when you have become accustomed to handle them a short time, you may yourself with a little knack and ingenuity, produce a great number of very pretty and graceful combinations. But like all other studies and accomplishments it requires a continuous and persistent practice to enable you to execute the movements with grace and skill.



THE TRAPEZE.



THE trapeze is, no doubt, one of the most useful apparatus of its kind and admits of innumerable and attractive exercises, and ranks with the best from its artistic character and the facility it possesses of testing and increasing the power of the trunk and upper limbs. These exercises are attractive to beginners and may be practiced indefinitely, modifying them until perfection is attained.

The Trapeze Bar should be 2 feet 6 inches in length, $1\frac{1}{2}$ inches thick, made of good, straight, grained hickory, and should be suspended in such a manner as to be within reach at a slight spring from the floor.



EXERCISES ON THE TRAPEZE.

TO RAISE ON THE BAR.

Exercise No .1.—(Fig. 1.)—Raise both hands and grasp the bar, keeping the hands apart, toes pointed downward, bend the arms until the breast is level with the bar, press strongly with



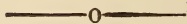
(Fig. 1.)



(Fig. 2.)

both hands at once on it and rise above it, completing the extension of the arms (Fig. 2) and coming to an upright position resting on the bar.

TO TURN ON THE BAR FORWARD.



Exercise No. 2.—(Fig. 3.)—Grasp the bar, hands at a distance, extend the lower limbs to the front, at the same time lowering the body to the full length of the arms, the legs together and

(Fig. 3.)



(Fig. 4.)



(Fig. 5.)



straight, toes pointed to the front, lift the feet, lower the body, the arms perfectly straight until the feet are as high as the bar. (Fig. 4.), bend

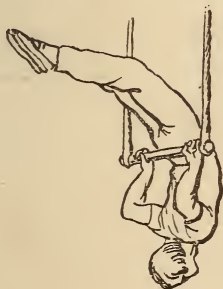
the arms and at the same time elevate the body until the waist is as high as the bar, pass the lower limbs over the bar, the trunk following, revolve on the waist, straighten the arms and rest on the bar (Fig. 5).



TO TURN ON THE BAR BACKWARD.



Exercise No. 3.—(Fig. 6.)—Raise as in the



(Fig. 6.)

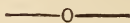


(Fig. 7.)

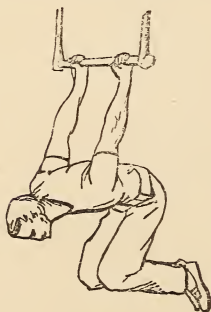
previous exercise, pass the feet under the bar

between the hands, and by a continuous movement bend the back inward and extend the legs upward, bending the arms until the waist is as high as the bar. Let the lower half of the body fall slowly to the front (Fig. 7), and as it descends let the upper half slowly down, the back touching the bar, then drop to the floor.

TO TURN UNDER THE BAR.



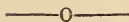
Exercise No. 4.—(Fig. 8.)—Raise, as in previous exercise, until the feet are as high as the



bar, pass the feet under the bar between the hands, and let them descend close to the ground without touching it, remain suspended for a few moments then reverse the movement and come to the original position.

(Fig. 8.)

TO TURN UNDER THE BAR WITH ONE HAND.



Exercise No. 5.—(Fig. 9.)—Raise and

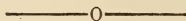


(Fig. 9.)

turn under the bar as in previous exercise, and when the feet descend close to the ground fold the legs close to the body, let go the left hand and swing around on the right arm, making a complete turn, and come again to the front. Perform this exercise also with the left arm.



SUSPENDED RINGS.



THIS apparatus is similar in character to the Trapeze, giving a wide scope for exercising, passing from the simple to the most complicated evolutions. As in the trapeze exercise, they confine themselves mostly to the trunk and upper part of the body, and are excellent for straightening the spine. Where there is an inclination to be round shouldered, this exercise is invaluable.

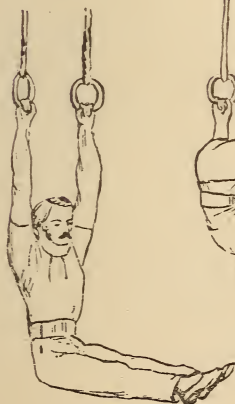
Rings for exercising should be 5 inches in diameter, and it is advisable to cover them with leather, as it makes them more agreeable to handle in winter. The rings should be fixed 18 inches apart, and should be suspended at the height of 5 feet 6 inches from the floor.

EXERCISES ON THE RINGS.

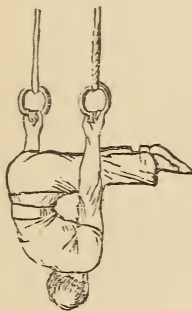
TO RAISE AND TURN ON THE RINGS.

Exercise No. 1.—(Fig. 1.)—Grasp the rings, one in each hand, let the body drop arm's length

(Fig. 1.)



(Fig. 2.)



(Fig. 3.)

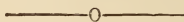


and pass both feet to the front, the legs together and straight, the feet touching and the toes

straight out. (Fig. 2.)—Lift both feet from the ground and pass them between the rings, arms and legs straight throughout, then complete (Fig. 3) by relinquishing the grasp and dropping on the feet to the floor.



TO TURN UNDER THE RINGS.

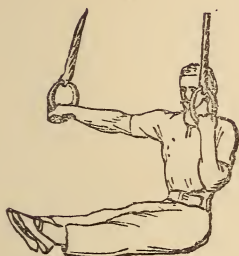
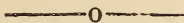


(Fig. 4.)

Exercise No. 2.—(Fig. 4.) Grasp the rings, one in each hand, same as in first exercise (the feet between the rings), separate the feet right and left, and insert each in its respective ring, curve the body and then remove the feet from the rings and resume original position.



TO RAISE ON THE RINGS WITH ONE ARM.

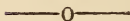


(Fig. 5.)

Exercise No. 3.—(Fig. 5.) Bend the body until the arms are at rest, raise the lower limbs (same as in first exercise), sustain the body on the left hand (retaining it close to the sides, extend the right arm, holding the ring at full length of the arm, pause and return the right arm to the side, repeat the extension with the left arm, then lower the body and quit the grasp.



TO RAISE ABOVE THE RINGS.

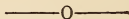


(Fig. 6.)

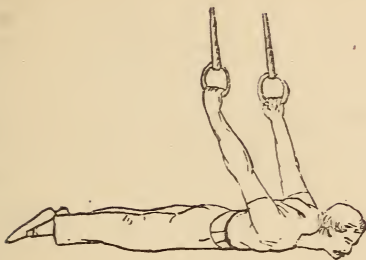
Exercise No. 4.—(Fig. 6.)—Bend the arms until the hands are at rest, raise the lower limbs in position, press strongly on the rings with the palms of the hand, straighten both arms completely above the rings, head erect, chest thrown out, legs straight together and the toes pointed to the ground, descend in same rotation, and let go the rings.



TO LOWER HORIZONTALLY UNDER THE RINGS.



Exercise No. 5.—(Fig. 7.)—Grasp the rings, lift both feet from the ground, same as in Fig. 2, extend them to the rear, until the trunk

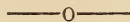


(Fig. 7.)

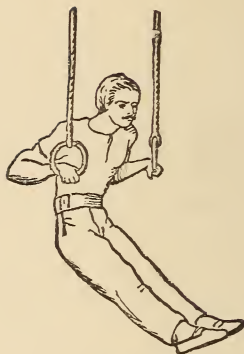
and lower limbs form a perfectly horizontal line, resume original position and drop to the ground.



TO RISE ABOVE THE RINGS VERTICALLY.



Exercise No. 6.—(Fig. 8.)—Sustain the body as in exercise No. 3. Press strongly with the hands on both rings, and raise the body so that the arms are vertical, then raise above the rings

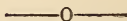


(Fig. 8.)

with the body to the full extension of the arms, lower and raise slowly without pausing ; repeat this often but slowly, and then come to the original position.



TO RAISE ABOVE THE RINGS BACKWARD.



Exercise No. 7.—(Fig. 9.)—Lift both feet from the ground and pass them between the rings and at the same time rapidly bend the arms,

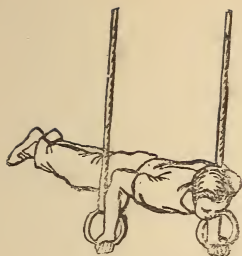


Fig. 9.

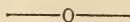
raising the body between the rings, until the hands are close to the sides, press with the forearms vertically above the rings, straighten the arms, and complete a circle with the lower limbs,

then lower the body as in Fig. 8 and come to the ground.

HERE are numerous other exercises on the rings and trapeze which cannot be explained very well here, they being to complicated, but you will by a little practice acquire them as you progress; however, there is one thing that must be borne in mind in these exercises, the body must not be encumbered with any unnecessary clothing, as it obstructs the free action of the limbs.

THE GYMNASIUM,

ITS REQUIREMENTS AND CONSTRUCTION.



IN the cultivation of the bodily powers it is quite necessary that the instruction should be progressive, that is to say, to-day's lesson should, as it were, be taken up to-morrow and carried a little further, and the next day a little further still, and so on to the end of the course.

When thus administered, each lesson is in accord with that which preceded it and with that which is to follow. Each aiding each, each improving that which has gone before, each preparing the way for that which is to come. But this can, of course, only be done where provision is made for a regular and consecutive instruction.

To execute any gymnastic exercise—or any exercise indeed of any kind in which strength is to be exerted, or benefit is to be derived from its performance—there must be a complete freedom of clothing. This simply means that a man must be stripped to his shirt and trousers, his neck open, his head bare and his sleeves rolled up to his elbows, and it is the essence of gymnastic exercises, after the rudimentary lessons, that the efforts shall for the most part be brief and energetic.

It is quite essential to safety as well as to advancement that the strictest order and propriety should be preserved in the gymnasium.

Any disposition on the part of the learner to be inattentive and careless should be checked at once by the instructor.

The essential points to be attained in constructing a gymnasium are:

First.—Ample space.

Second.—Abundance of light.

Third.—Pure air.

A building or room 80 feet by 40 feet will af

ford an ample space for a gymnasium and will give abundant accommodations for a large school.

Of course, I am speaking of large cities where economy of room is a consideration ; but in the suburbs, or in the country, where a greater space is available and a larger space can be procured, so much the better.

Abundant light is a weighty consideration, either for workshop, gymnasium or any other purpose ; it must be admitted to every part of the building to enable the pupils to see every particle of the apparatus distinctly, so that no accidents on that score may happen, and it also contributes to the cheerful appearance of the building and gives encouragement to the pupils.

The question of pure air is of essential importance. There is nothing more necessary to good health and health-giving exercise than pure air. Where there are a great number of persons exercising in a room, and particularly in the winter time when the building or room is heated and therefore closed, the atmosphere becomes impure, and it is therefore of the highest importance

that the building should be thoroughly ventilated as often as possible.

Pure air is imperative and necessary everywhere, not only for the benefit of health, but also as a natural stimulant to physical exertions.

In regard to the classification of the apparatus of the gymnasium, the distinction is very important. The system of exercising should be divided into two classes :

First.—Those with movable apparatus used for the introductory course, in which the learner wields or lifts the article of apparatus, he himself standing.

Second.—The exercises on the fixed apparatus, comprising the system where the learner himself moves or turns, the apparatus or machine being fixed or firm.

In the first system or class for movable apparatus, the floor should be perfectly free and firm, the apparatus, when not in use, should be ranged in racks for that purpose made along the wall.


In the second system or class where the apparatus is stationery or fixed, the floor should be

made of some soft, elastic material and carefully kept free from all obstacles.

One of the most important apparatus in a gymnasium is that which teaches men to clear objects by running, vaulting or leaping, therefore considerable space is required, and as quite a number can exercise at a time, it is desirable that a long clear space be devoted exclusively to that purpose and kept free from all obstructions.

Visitors should always be cordially invited to a gymnasium, for nothing serves more to stimulate the pupils than the presence of spectators, and there should in all properly constructed gymnasiums be a gallery devoted to that purpose.

It is a noticeable fact that the presence of visitors assists in preserving proper order and decorum ; they should, however, see the impropriety of mixing or in any manner interfering with the pupils during exercises.



RULES & REGULATIONS

FOR CONDUCTING A

GYMNASIUM.

1st. No pupil shall do any exercise without gymnastic belt and shoes.

2nd. Every pupil shall hang up his clothes during exercise, and his belt and shoes after exercise, in the places appointed for those purposes.

3rd. No pupil shall tie knots in the ropes, or displace in any way any portion of the apparatus.

4th. No pupil shall attempt any exercise which has been forbidden, or shall do on one machine an

exercise which properly belongs to another (such as jumping the railing, horses, &c.)

5th. No pupil shall attempt to use, or lift from the racks any clubs, bells, or bars, heavier than those which have been allotted to him by the instructor.

6th. The clubs, bells, or bars must be lifted from the hooks and placed in position at once, and not be rolled on the floor.

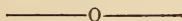
7th. No pupil shall fence, or play single stick, without his mask, jacket and gloves, or thrust at another who is not so prepared.

8th. No pupil shall use or displace another's belt, shoes, arms, mask, &c.



APPARATUS

REQUIRED FOR A GYMNASIUM.



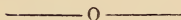
LIFTING.

INDIAN CLUBS.

BAR BELLS.

DUMB BELLS.

PULLEY WEIGHTS.



LOCOMOTION.

WALKING AND RUNNING TRACK.

LEAPING ROPE.

HORIZONTAL BEAM.

LEAPING POLE.

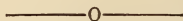
VAULTING POLE.

VAULTING BAR.



SPRINGING.

FIXED PARALLEL BARS.	THE TRAPEZE.
MOVABLE PARALLEL BARS.	PAIR OF RINGS.
HORIZONTAL BARS.	ROW OF RINGS.
ELASTIC LADDER.	LADDER PLANK.
BRIDGE LADDER.	SPRING BOARD.
INCLINED LADDER.	MATTRASS.



CLIMBING.

KNOTTED ROPE.	VERTICAL ROPE.
VERTICAL POLE.	SLANTING POLE.
PAIR OF SLANTING POLES.	TURNING POLE.
PAIR OF VERTICAL POLES.	THE MAST.



QUOITS.

Quoits are iron rings, flat on one side and rounded on the other, with a sharp outer edge (Fig. 1.); their average weight is from six to ten pounds per pair.

The game is played by pitching the quoits from a



(FIG. 1.)



(FIG. 2.)

distance at a short peg, technically termed the "Hob." (Fig. 2.)

Two of these pegs or hobs are set in the ground at a distance of from eighteen to twenty yards

apart, the distance being entirely at the option of the players.

Each player is armed with two quoits, and these they throw from hob to hob, trying, if possible, to pitch them actually over the hob, so as to “ring” it.

The game is counted in the same way as in bowls, the usual number to play for being eleven.

The mode of holding the quoit is shown in the accompanying illustration. (Fig. 3.)



(FIG. 3.)

The flat side is held downward, the forefinger is placed in a small notch, which is to be found in all quoits, and the thumb and other fingers are held, as seen in the engraving.

By means of the forefinger a spinning movement is given to the quoit, so as to enable it to fall with its edge downward. If properly thrown, the quoit ought to pass through

the air whitout showing the slightest vibration, and when it falls it ought to strike in the ground at an angle of 45 degrees with its flat side toward the thrower.

No correct play can be made until the art of holding and throwing steadily has been mastered. The best hob is made of hickory, as an iron hob cuts the edges of the quoits to pieces if they strike it, and as a good player will be sure to strike the hob several times in a game, this damage must be prevented.

There is no pleasure in playing with a ragged edge quoit, as it tears the hand and cannot be depended upon for setting fairly in the ground.

When the hob is fixed, a hole should be made and the hob pressed into it until it is an inch at least below the surface.

A white feather is then stuck into a little hole in the head of the hob, and the players throw at the feather. Of course, a quantity of feathers should be kept.

The ground should be carefully cleared of stones, and at each end a round hole, some six feet

in diameter and six inches deep, should be dug, and the space filled with clay. In the middle of the clay is the place for the hob. This clay "end" should be always kept damp, and in dry weather it should be watered and occasionally relaid.

The quoit is best aimed by holding it so as to look at the hob through it, and it should be thrown not from the elbow, but with a swing of the arm from the shoulder.

The art of throwing it correctly cannot be adequately imparted on paper. It is not however difficult to learn from personal instruction. If the quoit be not thrown steadily, that is, if it be a "wabblers," it is apt to roll away from the pitch instead of striking into the ground, or worse still, to turn with the flat side up, in which latter case it is considered dead, and cannot be counted for the game.

When only two are playing, the quoits are thrown from either hob alternately, the players following their quoits, and throwing them backward and forward; but when four play, it is custo-

mary for a pair of opponents to stand at each hob, and so make the same set of quoits do for both.

This is a very interesting game for two or four—more cannot conveniently play at it. It has also one great recommendation, that the actual results of the game can never be known until the last quoit has been cast.

Whatever the previous position of the game, a “ringer” may change the whole aspect of affairs.

As in bowls, each quoit that is “in,” counts one to the game, and a “ringer” counts two, and, of course, cuts out all other quoits whatsoever.



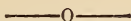
ARCHERY.

THE bow and arrow exercise has become recently one of the most popular pastimes, and deserves great encouragement. It is scarcely needful to say anything in praise of it, as it is well understood that it ranks of the first order in outdoor recreations. It is now and always has been recognized as one the first sports of England, and is there considered quite an accomplishment.

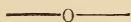
It is a very graceful and refined pastime, regardless of the benefits it imparts.

It trains the eye, it induces an erect and graceful carriage, expands the chest and gives plenty of walking exercise without fatigue, and also has the advantage of being equally adapted to ladies or gentlemen.

THE EQUIPMENTS OF THE ARCHER.



The Bow—The Self Bow.



The bows are of two kinds—*the self bow* and *the grafted bow*. The *self bow* consists of either one piece of wood, or of two pieces dovetailed at the handles, in which latter case it is called a *grafted bow*.

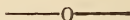
The self bow is by far the best. The best material for a self bow is yew; although a variety of other woods, such as lancewood, hickory, &c., are used. As it is but very rarely that a piece of yew can be obtained long enough for a bow of even quality throughout, the grafted bow was invented, in order that the two limbs—being formed by splitting one piece of wood into two strips—may be exactly of the same nature.

The backed bow consists of two or more strips of wood glued together in their length and com-

pressed so as to insure a perfect union, the wood may be of the same or of different woods—for instance, of yew backed with yew, yew with hickory, lancewood, &c., but of all backed bows, the yew backed yew is the best. It has been the subject of some consideration whether the self or the backed bows are best for shooting purposes. The very best authorities decide in favor of the self bow, although many prefer the backed bow.



How to Choose a Bow.



In selecting a bow, you must see that it tapers gradually from the handles to the horns, that the wood is straight, even grained and free from knots, the bow should be quite straight, and should be bent the way toward which it is inclined.

Beware of a bow which bends away from the string, as it jars the arms, and causes your aim to be unsteady, and if the string breaks, the bow

is apt to break also. See that both limbs are of equal strength, in which case they will describe equal curves; the handle should not be quite in the middle of the bow, but the upper edge of it should be a little above the centre, and above the handle a small piece of ivory or mother of pearl should be let in on the left side of the bow, in order to prevent the friction of the arrow wearing away the wood.

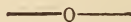
See that there are no sharp edges on the notches of the horns of the bow; for, if they are not properly rounded off they will be continually cutting your string; lastly, make sure your bow is not beyond your strength. It is a very common practice for persons to choose very strong bows, under the idea that it gives the impression and appearance of being perfect Samsons, but their ungainly struggles to bend the weapon and their utter failure are anything but dignified.

The strength of the bow is usually calculated by the weight, that is, the weight it takes to bend the bow, until the centre of the string is 28 inches for gentlemen and 25 inches for ladies' bows

from the handle; it is generally ascertained by suspending the bow by the handle from a small hand scale, while the string is drawn the required distance; gentlemen's bows generally range from forty-eight pounds to fifty-six pounds, and ladies' from twenty-eight pounds to thirty-two pounds.



How to Preserve the Bow.



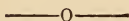
Many things will spoil a bow, which a little care and attention would prevent. Care should be taken not to scratch or bruise the bow. When shooting in damp weather, the bow—especially if a backed one—should be kept well wiped and perfectly dried with a waxed cloth before putting it away.

A backed bow will always keep the better, if a little wrapping is placed around each end just by the horn ; it prevents the bow from breaking, if by chance the glue is softened by damp. A bow should

always be kept as dry as possible, and when going to shoot at a distance, a waterproof cover is advisable. Do not unstring the bow too often while shooting ; once in every six double ends is quite often enough, unless there are many shooters.



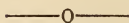
The Arrow.



There are two kinds of arrows. The *self* arrow and the *footed* arrow. The self arrow is made of one piece of wood, and the footed arrow is made with a hard piece of wood at the pile end. The latter is the best for several reasons, one being that it is not so liable to break, if it strikes anything hard. The best material for arrows is red deal, footed with lancewood.



How to Choose the Arrow



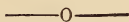
The first thing to ascertain is whether it is quite straight, which is done by bringing the tips of the thumb and two first fingers of the left hand together, and laying the arrow thereon, while it is turned around by the right hand. If it goes smoothly, it is straight, but if it jerks at all, it is crooked. Then make sure that it will stand the force of the bow without bending; if too weak, it will never fly straight. The pile or point should be what is called the square shouldered pile; some prefer the sharp pile, but the other answers best for all purposes. The nock should be full and the notch pretty deep, a piece of horn should be let in the notch, to prevent the string from cutting the arrow. The feathers should be full sized, evenly and well cut, and inserted at equal distances from each other. There are three kinds of arrows, the *Bobtailed*, *Chested* and *Straight*.

Horace Ford, the champion shot of England, decides in favor of the straight, and my readers cannot do better than take his advice. The arrow

should be carefully wiped each time it is picked up, as this not only preserves it, but the least particle of dirt adhering to the pile will effectually spoil the flight of the arrow. Every care should be taken to keep the feathers smooth and stiff; if attention be not paid to this point, everything else will be in vain; should they by chance become ruffled, a little warming in front of a fire (not to close) will generally restore them.

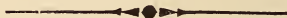


The Bow String.

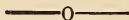


The best bow strings are imported and are usually procured ready made; but should you wish to fit your own, I will say a few words about them. The string should not be too thin, or it will not last long; in the selection of it it is best to be guided by the size of the notch of your arrows. At one end of it a strong loop should be worked to go over the upper horn, the other end should be left free in order to be fixed on the lower horn; this is

done with a peculiar loop; when the lower end is fastened, the distance between it and the loop at the other end should be such that when the loop is in its place and the bow strung, the string in a gentleman's bow is six inches, in a lady's five inches from the centre of the bow; the string should be lapped for an inch above the nocking point and five inches below it with waxed thread, and this again with floss silk to such a thickness that it completely fills the notch of the arrow, but without being too tight or it may split it. Never trust a worn string, take it off at once and put on a new one; should it break, it would probably snap your bow.



The Belt and Pouch.

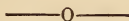


This is used for carrying the supply of arrows required in a match (three for use and one spare one), as also for hanging the tassel, &c. I would however recommend my gentlemen friends to dis-

pense with it, as it is always in the way, and the arrows can be carried far better in a pocket made diagonally in the right rear of the coat, so as to be convenient, but far enough back to escape the risk of the feathers being spoilt by the elbow rubbing against them.



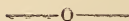
The Grease Box.



This is a little box, generally made of ivory, of such a shape as to hang from the belt. It is used for the purpose of holding the grease, which some archers use for anointing the string and their shooting-gloves, so as to get a better loose—the advantage of it is a matter of opinion. If used too freely, however, it causes the bow string to unravel.



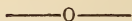
The Tassel.



This is merely a large tassel of green worsted, and is used for wiping the arrows, when they have stuck in the ground ; if a belt is not used, it should be hung from the button hole of the coat. It is an absolutely necessary part of the archer's outfit.



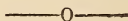
The Bracer.



This is a guard for the left arm, to prevent it being abraded by the string when loosed; it also confines the sleeve and keeps it out of the way; it is made of smooth leather, and is fastened to the arm by straps.



The Shooting Glove.

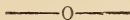


It is used for protecting the fingers of the right hand from abrasion by the string when loosing,

and consists of three finger guards attached to strips of leather, passing down the back of the hand to a strap fastened around the wrist. This form of glove has however of late years gone out of use. Most archers prefer the independent guards or tips for each finger, generally fastened by means of rubber rings on the fingers.



The Quiver.



This is a tin case somewhat in the shape of the quiver usually represented to form part of the equipment of Robin Hood and his band; it is not used as a part of the personal equipment of the archer but more for the purpose of protecting the spare arrows; it is made to hold from a dozen to three dozen arrows, and provided with a cover and lock to make all secure.



The Target.

—o—

It is made of straw, bound with strings into an even rope, which is twisted upon itself until it forms a flat disc, and then covered on one side with canvas painted with five concentric rings, namely: gold or centre; red, blue or inner; white, black and white or outer. These rings should all be exactly of the same width, the target itself being four feet in diameter. In scoring, the following value is given to the rings:

Gold	.	.	.	.	9
Red	.	.	.	.	7
Blue	.	.	.	.	5
Black	.	.	.	.	3
White	.	.	.	.	1

When the arrow strikes on the edge of two rings, the higher is counted, unless it is otherwise agreed upon. It is necessary to have two targets, one at each extremity of the distance fixed upon, as it is not usual to shoot more than three arrows at each "end"—as it is called—walking

over between each three to reclaim your arrows, and then shooting them back to the target you have just left.

By this means the different muscles are brought into play, those used while shooting are relaxed, and the muscles of the legs and body are brought into action, which renders the pastime of archery so healthy.

The stands for the targets are usually made of wood or iron, and somewhat resemble the easel of an artist.

GENERAL INSTRUCTIONS.

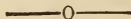
The archer having procured his outfit—although I should advise him not to overburden himself with any unnecessary accessories as they will only be in the way—take your bow and four arrows, (three for use and one spare one in case of accident), which he will put into his pouch or pocket, also his bracer, gloves or tips, tassel and a scor-

ing card; a spare string will also be prudent to have in the pocket.

Anything more than this is unnecessary.



Stringing the Bow.



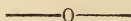
In stringing the bow, it is held by the handle by the right hand (flat side toward the body), with the lower horn resting on the ground against the hollow of the right foot; the left hand is then placed upon the upper part of the bow in such a manner that the base of the thumb rests upon the flat side of it, the thumb pointing upward; the bow is then bent by the combined action of the two hands, the right pulling, the left pressing it; at the same time the loop of the string is slipped into its place by the left thumb and forefinger.





ARCHER'S POSITION.

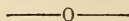
Position of the Archer.



It is difficult to determine exactly which is the best position for the archer. Every one naturally subsides into that which is most easy to him; the body, however, must be erect and carried easy on the hips, the feet slightly apart and the face and side turned toward the mark. Nothing looks worse than a stiff and constrained attitude.



Nocking, Drawing and Loosing.

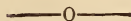


Great care must be taken that the arrow fits exactly into the whipped portion of the string; if too thick or too thin it is apt to split the arrow; the bow being held by the handle in the left hand, let the arrow be placed with the right (over, not under the string) on that part of the bow upon which it is to lie; the thumb of the left hand then

being placed gently over it, will serve to hold it under perfect command, and the forefinger and thumb of the right hand can then take hold of the nock end of the arrow, and manage it with the most perfect ease in any manner that may be required.

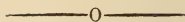


Drawing.



Having nocked the arrow, extend the left arm downward until it is perfectly straight, the hand grasping the handle of the bow, the arrow being held by the nocking end by the two first fingers of the right hand passed over the string, and on each side of the arrow. Raise the left arm slowly, still extended, until at right angles with the body, the string being drawn at the same time with the right hand until the arrow is drawn three-fourths of its length, when the right wrist and elbow should be about level with the shoulder, which done, the archer must take aim before loosing.

Loosing.




Having drawn the arrow to its full extent, the object to be attained is to remove the obstruction of the fingers from the string suddenly, yet in such a manner that no jerk is given to the string (which would be fatal to the aim), the string should lie across the fingers at an equal distance from the tip of each, and the fingers must be all withdrawn at once and at the same instant.

In aiming it is better to keep BOTH eyes open and directed toward the target, instead of closing one eye, as is customary in rifle shooting. The archer will seldom be able to aim directly at the gold or centre, he will have to make allowance, in almost every instance, for the variation, caused by the wind, &c. This cannot be taught, the archer will learn by experience where on the target the proper point of sight lies, and will learn to aim accordingly.

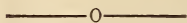
Although the action of drawing, aiming and loosing have been described separately, no perceptible pause should be between them, they

should all appear to form a part of the same movement.

In concluding this subject I hope I have succeeded in making myself perfectly intelligible to my readers, and trust these hints may be of some service to them. Although I have quoted from the best authorities, it must be borne in mind that “practice makes perfect,” and that you cannot succeed in any of these exercises without some effort on your part, as it is sometimes difficult to explain that which is not easily learnt even by example.



MUSCULAR TRAINING.



This highly important branch of physical education requires the strictest attention of the amateur. During the course of training he should be cautious in the commencement not to exercise with heavy dumb bells or clubs beyond his ability, and particularly avoid lifting heavy weights or performing difficult evolutions on any gymnastic apparatus, such as climbing the ladder hand over hand, jumping on the spring board, or any of those violent or laborious exercises, which would tend more to exhaust the vitality than to develop strength. The exercises should graduate from the most simple movements with a light pair of clubs or dumb bells to the complicated evolutions, described in another part of this book, taking care in the beginning not to overtax the muscles or break down the system by any over-exertion, which, by



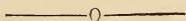
STRIKING BAG EXERCISE.

carelessness or indiscretion, may be apt to do an irreparable damage, gentle perseverance will do more than any exertion that overtrains the body.

THE STRIKING BAG.

One of the most useful accessories to muscular training, after the pupil has advanced a little, is the "Striking Bag." It is an arrangement that can be gotten up at a trifling expense, and is invaluable; it accomplishes a great deal, and its results are as positive as any exercise that can be suggested. It consists of a strong canvas bag about three feet long, with the capacity of about two bushels, filled with well-dried sawdust tightly pressed, the bag to be suspended by a rope from a hook in the ceiling in such a manner that the bottom should reach about twelve inches below the chin. Take a position in front of it, strike out right and left, punch, pummel, dance, skip and dodge around it as if you were punishing an enemy, and he getting the worst of it.

The “Striking Bag” exercise is an excellent one for both hands as well as the entire body. It imparts a vital tone to the system, excites the blood and stirs the languid pulse, and, if persevered in, will bring back the color of health to many a faded cheek.



In conclusion, the author begs to say—as this is his first book and probably his last—that he has written it in the pure spirit of serving humanity, and to promote the good and welfare of his fellow-beings. It is his heartfelt desire to stimulate in the minds of the rising generation that inclination for innocent pastime and manly amusement in the form of a series of attractive and simple athletic exercises. This book, it must be admitted, is not written for professionals, but for amateurs and beginners.

The author has endeavored to avoid all technical phraseology and has confined himself to plain language, and he has also suggested such apparatus that is simple, inexpensive, not complicated, and within the reach of all classes.

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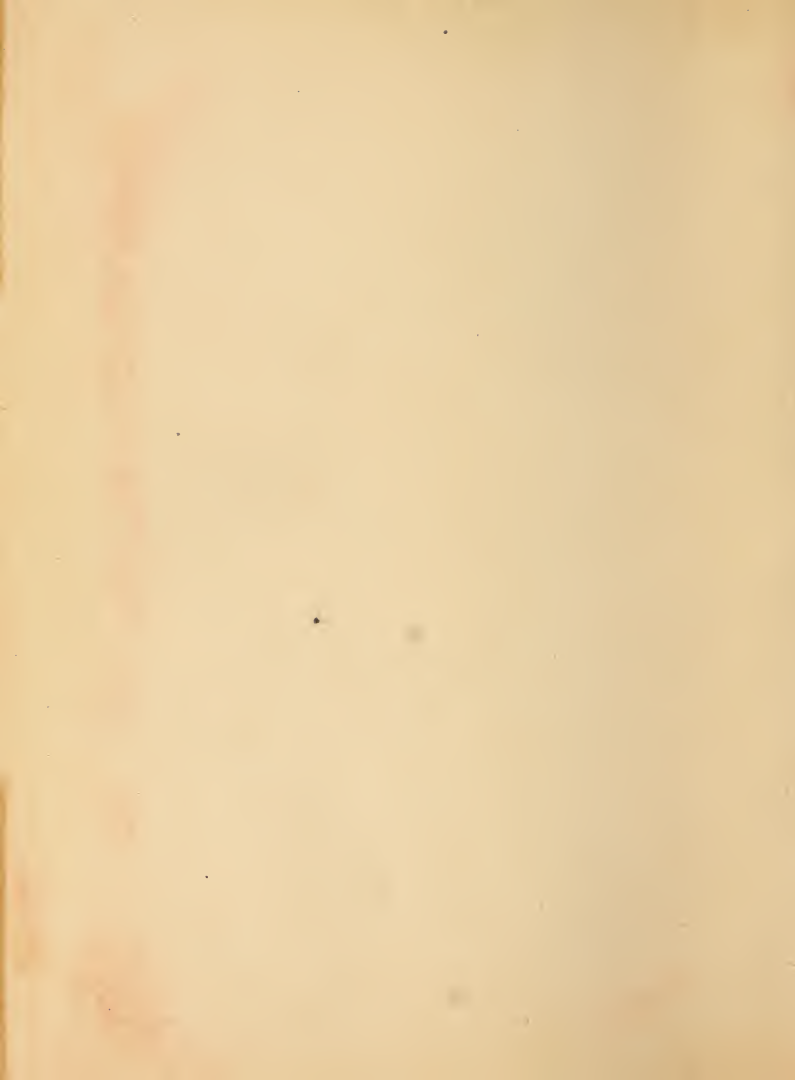
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